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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,933	10/27/2004	Donna L. Mendrick	GENE-035/15US 071912-2115	7118
58249 COOLEY GOI	7590 09/07/2007 DWARD KRONISH LLP		EXAMINER RIGGS II, LARRY D	
ATTN: Patent Group			RIGGS II, LARRY D	
Suite 500 1200 - 19th St	reet NW		ART UNIT	PAPER NUMBER
	N, DC 20036-2402		1631	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/501,933	MENDRICK ET AL.	
Office Action Summary	Examiner	Art Unit	
	Larry D. Riggs II	1631	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a d will apply and will expire SIX (6) MOI ute, cause the application to become Al	CATION. reply be timely filed  ITHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 26  2a) This action is FINAL.  2b) The 3 Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal mat		<b>is</b>
Disposition of Claims	•	•	
4)  Claim(s) 1-5,7-10,12-17,20-22,46-49,53-56,6 4a) Of the above claim(s) is/are withdenset of the above claim(s) is/are withdenset of the above claim(s) is/are allowed.  6)  Claim(s) is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) 1, 2-5, 7-10, 12-17, 20-22, 46-49, 50 requirement.  Application Papers  9)  The specification is objected to by the Examination of the above claim(s) filed on is/are: a) and applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the above claim(s) 11  The oath or declaration is objected to by the	rawn from consideration.  13-56, 61 and 66-69 are subsected to be drawing(s) be held in abeyalection is required if the drawing	ject to restriction and/or election  by the Examiner.  nce. See 37 CFR 1.85(a).  g(s) is objected to. See 37 CFR 1.121	(d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a lie	ents have been received.  Ints have been received in a riceived in a riceived in a riceived in a riceived been received.  In a riceived in a r	Application No I received in this National Stage	
	•		•
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application 	

**DETAILED ACTION** 

## **Claims**

Cancellation of claims 2, 6, 11, 18-19, 23-45, 50-52, 57, 62-65 is acknowledged in the amendment filed June 26, 2007. Claims 1, 2-5, 7-10, 12-17, 20-22, 46-49, 53-56, 61 and 66-69 are pending.

## Election/Restrictions

Applicant's election without traverse of Group I, a method of determining a compound's toxicity effect on gene expression of listed genes, and species Acetaminophen and liver necrosis, in the reply filed on June 26, 2007 is acknowledged.

Applicant's election with traverse of a single combination of sequences listed in Tables 5A-5WWW, in the reply filed on June 26, 2007 is acknowledged. The traversal is on the ground(s) that a restriction on the basis of individual sequences is not warranted here under the unity of invention standards, especially in light of the election of species requirement, because the instant application is a national state application of PCT/US03/03194. This is not found persuasive because each of the sequences listed in Tables 5A-5WWW, are unrelated sequences with different chemical structures and do not form a single general inventive concept under PCT Rule 13.1.

The requirement is still deemed proper and is therefore made FINAL.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

Application/Control Number: 10/501,933

Art Unit: 1631

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 2-5, 7, 9, 12-17, 20-22, 47-49, 53-56, 61 and 66, drawn to a method of predicting a toxic effect of a compound.

Group II, claim(s) 8 and 67, drawn to a method to predict the progression of a toxic effect of a compound.

Group III, claim(s) 10, 46, 68 and 69, drawn to a method to identify an agent which modulates toxicity.

The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The three different methods are directed to different results and thus necessarily have different modes of action.

Regarding Groups I and II, each process is limited to comprising distinct process steps not required by the other methods which define a special technical feature that is unique to each method. For example the method of Group I requires correlating a gene

Application/Control Number: 10/501,933

Art Unit: 1631

expression profile with toxic properties of a compound. Group II requires detecting the level of expression in a tissue or cell sample exposed to the compound of genes

corresponding to the listed sequences to indicate progression of toxicity.

Regarding Groups I and III, each process is limited to comprising distinct process steps not required by the other methods which define a special technical feature that is unique to each method. For example the method of Group I requires correlating a gene expression profile with toxic properties of a compound. Group III requires exposing a cell to an agent and a known toxin, and detecting the level of expression in the cell of genes corresponding to the listed sequences to indicate toxic response.

Regarding Groups II and III, each process is limited to comprising distinct process steps not required by the other methods which define a special technical feature that is unique to each method. Group II requires detecting the level of expression in a tissue or cell sample exposed to the compound of genes corresponding to the listed sequences to indicate progression of toxicity. Group III requires exposing a cell to an agent and a known toxin, and detecting the level of expression in the cell of genes corresponding to the listed sequences to indicate toxic response.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

Art Unit: 1631

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete <u>must</u> include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after

the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D. Riggs II whose telephone number is 571-270-3062. The examiner can normally be reached on Monday-Thursday, 7:30AM-5:00PM, ALT. Friday, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran can be reached on 571-272-0720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LDR/ Larry D. Riggs II Examiner, Art Unit 1631 /John S. Brusca/ Primary Examiner Art Unit 1631